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UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/617,599	07/11/2003	Jean-Marie R. Dautelle	RTN-171AUS	2932

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EXAMINER
BRIER, JEFFERY A

ART UNIT	PAPER NUMBER
2672	

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Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	10/617,599	DAUTELLE, JEAN-MARIE R.
	Examiner	Art Unit
	Jeffery A. Brier	2672

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
   closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

   4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>24 October 2003</u> is/are: a)☐ accepted or b)☒ objected to by the Examiner.

   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a)☐ All   b)☐ Some * c)☐ None of:

   1.☐ Certified copies of the priority documents have been received.

   2.☐ Certified copies of the priority documents have been received in Application No. _____.

   3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
      application from the International Bureau (PCT Rule 17.2(a)).

   * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
   Paper No(s)/Mail Date <u>4/28/05, 12/20/04,</u> *and* <u>7/11/04</u>

4) ☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____ .

Detailed Action

Drawings

1.   The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description:

In figure 2 reference number 38 has no corresponding description in the specification.

In figure 3B reference numbers 102, 104, 106,108, and 110 have no corresponding description in the specification.

In figure 4 reference number 174 has no corresponding description in the specification.

Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

2.   The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5)

because they do not include the following reference sign(s) mentioned in the

description:

Reference number 40f described at page 10 line 3 is not present in figure 2A.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in

reply to the Office action to avoid abandonment of the application. Any amended

replacement drawing sheet should include all of the figures appearing on the immediate

prior version of the sheet, even if only one figure is being amended. Each drawing sheet

submitted after the filing date of an application must be labeled in the top margin as

either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the

changes are not accepted by the examiner, the applicant will be notified and informed of

any required corrective action in the next Office action. The objection to the drawings

will not be held in abeyance.

3.   The drawings are objected to because:

the BUTTON in figure 2A does not have the label 40a;

the arc to BUTTON does not have a reference number see page 10 line 4;

reference number 40 is lead to the wrong area in figure 2A; and

figure 6 shows aircraft images 304a, 304b, 304c, 304d, and 304i while the

specification describes aircraft images 304a-304i at page 14 line 22 and shows other

images 304e, 304f, and 304h, thus, the specification needs to be amended to correclty

described figure 6.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

4.   The disclosure is objected to because of the following informalities:

on page 8 at line 17 "application 14" should be changed to "application 12"; and at line 19 "button 12" both occurrences should be changed to "button 14".

Appropriate correction is required.

Claim Rejections - 35 USC § 112

5.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6.   Claims 19 and 20 rejected under 35 U.S.C. 112, second paragraph, as being

indefinite for failing to particularly point out and distinctly claim the subject matter which

applicant regards as the invention.

Claim 19:

At line 1 "the scene graph data" lacks antecedent basis in the claim.

Claim 20:

At line 1 "the scene graph data" lacks antecedent basis in the claim.

7.   Claims 15-20 rejected under 35 U.S.C. 112, second paragraph, as being

incomplete for omitting essential elements, such omission amounting to a gap between

the elements. See MPEP § 2172.01. The omitted elements are: generating the scene

graph data and storing the scene graph data in a graphics module. The scene graph

display command alone does not cause a graphics module to produce the two-

dimensional image.

Claim Rejections - 35 USC § 101

8.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

9.   Claims 1-20 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 8-14 claim: A computer program medium having computer readable code thereon for providing a graphical display for a desktop application, the medium comprising:. These claims do not claim having a computer or equivalent execute the computer readable code to perform the graphical display, thus, these claims do not claim a process or machine and the scope of these claim cover computer code written on paper or other computer readable material as in copyrightable intellectual property rather than 35 USC 101 intellectual property.

Claims 1-7 claim: A method of providing a graphical display for a desktop application, comprising: ...the scene graph data adapted to be stored... capable of generating... the scene graph display command adapted to be interpreted... . These claims claim due to the ambiguous language "adapted" and "capable of" the mental steps of a human and the mental steps of a human using pencil and paper. In re Prater, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550- 51 (CCPA 1969) (Claim 9 was directed to a process of analyzing data generated by mass spectrographic analysis of a gas. The process comprised selecting the data to be analyzed by subjecting the data to a mathematical manipulation. The examiner made rejections under 35 U.S.C. 101 and 102. In the 35 U.S.C. 102 rejection, the examiner explained that the claim was

anticipated by a mental process augmented by pencil and paper markings. The court

agreed that the claim was not limited to using a machine to carry out the process since

the claim did not explicitly set forth the machine. The court explained that "reading a

claim in light of the specification, to thereby interpret limitations explicitly recited in the

claim, is a quite different thing from reading limitations of the specification into a claim,'

to thereby narrow the scope of the claim by implicitly adding disclosed limitations which

have no express basis in the claim." The court found that applicant was advocating the

latter, i.e., the impermissible importation of subject matter from the specification into the

claim.) MPEP 2111.

Claims 15-20 claim: A system for providing a graphical display for a desktop

application, comprising:... capable of generating... the scene graph display command

adapted to be interpreted.... A human is a system, a processor, an apparatus. Thus,

the rational given for claims 8-14 applies here.

Claim Rejections - 35 USC § 102

10.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11.   Claims 1, 2, 6-9, 13-16, 19, and 20 are rejected under 35 U.S.C. 102(b) as being

anticipaged by the article titled Jazz: An Extensible Zoomable User Interface Graphics

Toolkit in Java by Benjamin B. Bederson, Jon Meyer, Lance Good.

This article discusses scene graphs generating 2D images, 3D images, widgets, graphs, scenes, and text. This article may be found at:

http://citeseer.ist.psu.edu/bederson00jazz.html

http://portal.acm.org/citation.cfm?id=354754&coll=ACM&dl=ACM&CFID=46921808&CF

TOKEN=68192717

http://www.cs.umd.edu/hcil/jazz/learn/papers/HCIL-2000-13.pdf

http://www.cs.umd.edu/hcil/jazz/learn/publications.shtml

Applicant alleges on page 8 lines 8-12: [0040] Also, existing scene graph APIs provide three-dimensional (3D) graphical objects and corresponding 3D images on a graphical display in particular software environments, for example, in computer games. However, scene graphs have not been applied to other software environments, for example, two-dimensional (2D) desktop applications having combinations of 2D windows, 2D text, and 2D graphics. However, the prior art supplied by the examiner proves this allegation concerning 2D windows, 2D text, and 2D graphics to be incorrect.

A detailed analysis of the claim follows:

Claim 1:

The Jazz article teaches a method of providing a graphical display for a desktop application (*Page 177 in the section under the title Creating Application Specific Widgets describes various desktop applications of Jazz.*), comprising:

generating scene graph data (*Page 173 discusses the JAZZ toolkit which develops ZUI application by using scene graphs.*), the scene graph data including at least one two-dimensional object (*Page 171 in the abstract, page 173 in the second column first paragraph, and page 174 discuss two dimensional objects and 2D scene graphs representing the 2D objects.*), the scene graph data adapted to be stored in a graphics module (*The program as whole may be considered a graphics module.*) capable of generating the graphical display (*Inherently the scene graph needs to be stored in order for the computer to use the scene graph to generate the 2D object's image.*); and

generating a scene graph display command (*Inherently a command is present that causes the computer to read the stored scene graph in order to process the scene graph into an image of the 2D object.*) associated with the at least one two-dimensional object, the scene graph display command adapted to be interpreted by the graphics module resulting in at least one two-dimensional image on the graphical display, wherein the at least one two-dimensional image is associated with the at least one two-

dimensional object (*The scene graph corresponding to a two dimensional object is used by the computer to generate an image corresponding to the two dimensional object.*).

Claim 2:

The Jazz article teaches the method of claim 1, wherein the generating the scene graph display command includes:

receiving object data (*name of the object is object data.*) associated with a selected one of the at least one two-dimensional object; and

associating the object data (*Associating the name of the object with the scene graph that generates the image.*) with the selected one of the at least one two-dimensional object to provide the scene graph display command (*The command that causes the computer to execute the scene graph would refer to the name of the scene graph. Refer to pages 174-176 under the heading Architecture.*).

Claim 6:

The Jazz article teaches the method of claim 1, wherein the generating the scene graph data includes generating the scene graph data associated with at least one two-dimensional object and with at least one three-dimensional object (*In the section under the heading The JAZZ Toolkit found on pages 173-174 the article discusses 3D and 2D images generated by JAZZ.*).

Claim 7:

The Jazz article teaches the method of claim 1, wherein the scene graph data includes at least one text object (*On page 173 second column first paragraph the Jazz article teaches fonts which are text and characters and on page 171 in the introduction text areas are discussed and figure 1 shows an image of text objects displayed to the user in the HiNote snapshot.*), the at least one two-dimensional object includes at least one text character, and the at least one two-dimensional image includes at least one text character image.

Claims 8 and 1日:

These claims correspond to method claim 1 and are rejected for the reasons given for claim 1. Since Jazz is a JAVA program it inherently has computer program medium having computer readable code and it inherently teaches using a computer to execute the program.

Claims 9 and 16:

These claims correspond to method claim 2 and are rejected for the reasons given for claim 2.

Claims 13 and 19:

These claims correspond to method claim 6 and are rejected for the reasons given for claim 6.

Claims 14 and 20:

These claims correspond to method claim 7 and are rejected for the reasons given for

claim 7.

Claim Rejections - 35 USC § 103

12.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

13.   Claims 3-5, 10-12, 17, and 18 are rejected under 35 U.S.C. 103(a) as being

unpatentable over the article titled Jazz: An Extensible Zoomable User Interface

Graphics Toolkit in Java by Benjamin B. Bederson, Jon Meyer, Lance Good in view of

applicants admission of the prior art.

Claims 3, 10, and 17:

Each of these dependent claims claim wherein the object data is provided by a

radar system and is associated with at least one of an aircraft and a geographic feature.

Jazz does not mention these specific object images, however, Jazz teaches

using scene graphs to define and later generate any two dimensional image which to

one of ordinary skill in the computer graphics art would include the claimed aircraft and

geographic feature. Applicant in the Background of the Invention discusses prior art

systems that display images of aircraft and geographic features. It would have been

obvious to one of ordinary skill in the art at the time of applicants invention to define

aircraft and geographic images with 2D scene graphs because these images require no

different graphics generation than the images specifically discussed by Jazz.

Claims 4, 11, and 18:

Each of these dependent claims claim wherein the at least one two-dimensional

object represents an aircraft.

Jazz does not mention this specific object image, however, Jazz teaches using

scene graphs to define and later generate any two dimensional image which to one of

ordinary skill in the computer graphics art would include the claimed aircraft feature.

Applicant in the Background of the Invention discusses prior art systems that display

images of aircraft.   It would have been obvious to one of ordinary skill in the art at the

time of applicants invention to define aircraft images with 2D scene graphs because

these images require no different graphics generation than the images specifically

discussed by Jazz.

Claims 5 and 12:

Each of these dependent claims claim wherein the generating the scene graph

data includes generating the scene graph data including at least one of a first two-

dimensional scene graph data portion representing a land geography, and a second

two-dimensional scene graph data portion representing one or more aircraft.

Jazz does not mention these specific object images, however, Jazz teaches using scene graphs to define and later generate any two dimensional image which to one of ordinary skill in the computer graphics art would include the claimed aircraft and geographic feature. Applicant in the Background of the Invention discusses prior art systems that display images of aircraft and geographic features. It would have been obvious to one of ordinary skill in the art at the time of applicants invention to define aircraft and geographic images with 2D scene graphs because these images require no different graphics generation than the images specifically discussed by Jazz.

Prior Art

14.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Jazz: An Extensible 2D+Zooming Graphics Toolkit in Java by Benjamin B. Bederson, Britt McAlister discusses scene graphs generating 2D images. This article may be found at:

http://www.cs.umd.edu/hcil/piccolo/learn/papers/HCIL-99-07.pdf

http://www.cs.umd.edu/hcil/jazz/learn/publications.shtml

Mallart et al., U.S. Patent No. 6,445,740, teaches 2D and 3D scene graphs.

Dimsdale, U.S. Patent No. 6,420,698, teaches:

(247)   This module will also rely heavily on the Finite State
Machine module which provides the basic tools necessary to
control the changing state and feedback of the user interface
and for determining which functions of the system are available
to the user at any given time.

(248)   Model Viewing Module

(249)   The model viewing module encapsulates all functionality
involving the display of the object database and display of
feedback and auxiliary information in the object scene. Most of
the base functionality is provided by Inventor but a strong
encapsulation of this module will prevent dependence on
Inventor.

(250)   Picking of objects in the scene should be handled by a
separate module (which might, in a simplified implementation,
make calls to the picking functionality of this module) to
permit the implementation of fast picking mechanisms using a
spatial database.

(251)   This module consists of such items as: visual object
node construction from geometric objects scene rendering setting
rendering options (lighting, shading, texture, etc) change of
viewpoint highlighting/feedback operations

(252)   The model viewing module interacts closely with the User
Interface Module to provide interactive viewing. Because of the
interactive viewing functionality provided by Inventor viewer,
the separation of interactive view manipulation (typically part
of the User Interface Module) from scene management may be
difficult or possibly undesirable. The User Interface Module
will rely on functionality provided by this module to provide
feedback within the scene to indicate operands to tools,
selected objects, etc.

(253)   The model viewing module is tightly coupled to the
Database Module and the geometric objects which it contains.
Geometric objects will be stored separately in the database and
the scene requiring that care be taken to insure the consistency
of the object database with the scene that the user is viewing.
This separation allows such operations as viewing subsets of the
database, highlighting an object as feedback to a tool, and use

of spatial hierarchies within the database to be performed
intuitively.

Basso et al., U.S. Patent No. 6,317,131, teaches in the Background of the

Invention at column 1 lines 17-24 describing two dimensional and three dimensional

scenes by scene graphs.

15.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Jeffery A Brier whose telephone number is (571) 272-

7656. The examiner can normally be reached on M-F from 7:00 to 3:30. If attempts to

reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael

Razavi, can be reached at (571) 272-7664. The fax phone Number for the organization

where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

Jeffery A Brier
Primary Examiner
Art Unit 2672